IN THE CLAIMS:

Please amend claims 1, 2, 3, 4, 6, 7, 13, 14.
Keep claims 5 and 11, as-is.

1. (Currently Amended) A system for enabling asynchronous authentication of a non-preauthenticated client-User means in a Kerberos domain servicing multiple requesting non-preauthenticated clients while eliminating any delays due to multiple concurrent authentication requests, said system comprising:

    (a) client-User means (10) for requesting authentication from a <u>specialized</u> client-server means (13);

    (b) <u>said specialized</u> client-server means (13) for communicating with a Kerberos server means (20) for developing a specific set of credentials for each client requesting authentication[[;]] <u>said specialized client server means utilizing a Unisys ClearPath server;</u>

    (c) said Kerberos server means (20) for developing an asynchronous authentication response and a Ticket Granting Service to said client-server means (13).

2. (Currently Amended) The system of Claim 1 wherein said client-User means (10) includes:

> (a1) multiple client-Users who may concurrently seek authorization to utilize said _specialized_ client-server[[.]] _means._

3. (Currently Amended) The system of claim 1 wherein said Kerberos server means (20) includes:

(c1) means to return an authentication response to said <u>specialized</u> client-server means;

(c2) means to return a Ticket Granting Service signal to said <u>specialized</u> client-server means.

4. (Currently Amended) The system of claim 1 wherein said <u>specialized</u> client-server means includes:

(b1) communication means (MARC40, COMS42) for exchanging information between a requesting principal or client-User, a Master Control Program, a General Security Service Library (GSS38), and a Kerberos Support Library (KSL34);

(b2) said Master Control Program (60) for controlling said communication means, said General Security Service Library and said Kerberos Support Library (34);

(b3) said General Security Service Library (GSS38) providing multiple threads for handling multiple concurrent requests for authentication;

(b4) said Kerberos Support Library (34) for developing and storing specific authentication credentials for each validated client-User authentication request.

5. (Original) The system of claim 4 wherein said Kerberos Support Library (34) includes:

> (b4a) means for accessing said Kerberos Server means (20) to acquire an authentication response and a Ticket Granting Service.

6. (Currently Amended) A secure message transmission system in a Kerberos environment which permits a client-user to operate in a network for authentication request transmittal and message response without suspending client service when a Kerberos Server (20) has not yet responded to an earlier request for an authentication message code signal, said system comprising:

(a) client-terminal means (10) to indicate an original request for validation of an authentication message signal from a Kerberos Server (20);

(b) specialized Unisys ClearPath server means having program means (MARC 40 and COMS 42), under control of a Master Control Program (MCP60), for transmitting requests for service to a Kerberos Support Library (34), a General Security Service Library (38) and to said Kerberos Server (20) for the return of an authentication response message to said client terminal means (10) from credential information placed in said General Security Service Library[[;]] of said specialized server means;

(c) means for enabling said Kerberos Support Library (34) to elicit authentication information and Ticket Granting Service from said Kerberos Server (20) for deposit as validating credential data in said General Security Service Library (38).

7. (Currently Amended) A method for asynchronous authentication of a non-preauthenticated originating terminal in a Kerberos domain, said authentication occurring without delay due to other concurrent requests for authentication by other terminals such as client-Users and principals, said method comprising the steps of:

(a) originating a request, to a specialized Unisys ClearPath client-server, for authentication by a non-preauthenticated terminal and including the step of:

(a1) originating concurrent multiple requests for authentication from multiple client-Users and principals;

(b) processing said originating request and other originating requests concurrently and including the steps of:

(b1) developing a set of identifying credentials for said originating terminal and including the steps of:

(b1a) requesting, via a communication means (MARC 40, COM942), under control of a Master Control Program (MCP60), a Kerberos Support Library (34), and a Kerberos Server (20), for credentials and a session key;

(b1b) creating a credential structure by said Kerberos Support Library (34) to identify said originating terminal and provide a Ticket Granting Service;

(b1c)   generating, by a General Security Service Library (GSS 38), [[OF]] of A Name-Handle and GSS Credential Tag that identifies the originating terminal to said GSS (38) and to said Kerberos Support Library (34);

(b1d)   generating a message, by said Kerberos Support Library (34), to inform said communication means (MARC 40, COMS42) that the Kerberos authentication cycle has been successfully completed;

(b2) asynchronously validating said originating terminal for use of a Kerberos domain;

(c)   responding back asynchronously by said specialized ClearPath client-server to authenticate the validity of said original requesting terminal without any delays due to other concurrent requests for authentication which includes the step of:

(c1) utilizing said communication means (MARC 40, COMS42) to transmit an authentication signal from a Kerberos Support Library (34) to said originating terminal.

8. (Cancelled).

9. (Cancelled).

10. (Cancelled).

11. (Previously Amended) The method of claim 7 wherein step (b1) includes the steps of:

(11b1a) processing concurrent authentication requests via multi-threaded processing means to develop a specific credential for each originating terminal;

(11b1b) conveying a completed authentication request to said Kerberos Support Library (34) and said communication means (MARC 40, COMS42).

12. (Cancelled).

13. (Currently Amended) In a network wherein multiple client-terminals communicate with a _specialized Unisys ClearPath_ client-server _means_ (13), having a Kerberos Support Library (34), and [[communicate]] _communicating_ with a communications means (MARC 40, COMS 42), a General Security Service Library (38) and said _specialized_ client-server _means_ for accessing response information from a Kerberos server (20), a method for enabling a requesting client-terminal to receive an authentication response message asynchronously from said Kerberos Server (20) comprising the steps of:

    (a) initiating an authentication command request by a requesting client-terminal;

    (b) utilizing _said specialized client-server means as_ a communication management system, under control [[at]] _of_ a Master Control Program (MCP60), using a communication means having a communication management program (COMS 42) and menu assisted resource control program (MARC 40) to communicate said _authentication_ command request to said Kerberos Server (20) via said Kerberos Support Library (34) and to receive a Kerberos response message for credential processing by said General Security Services Library (38) which is then conveyed by said communication means (40, 42) to said requesting client-terminal.

14. (Currently Amended) The method of claim 13 which includes the step of:

> (c) Terminating the session between said client-terminal (10) and said Kerberos Support Library (34) once the authentication request response has been transmitted from said General Security Library (38), thus allowing said _specialized_ client-server _means_ (13) to process other authentication requests.

15. (Currently Amended) The method of claim 13 wherein step (b) includes the step of:

> (b1) initiating an error message by said Kerberos Support Library (34) when a failure in authentication has been recognized;
>
> (b2) requesting, via said error message, that said requesting client-terminal [[(b)]] should initiate a log-on.